

# ACCESSIBILITY = BETTER USABILITY

Tips, Tricks, and Best Practices for Section 508 Compliance & WCAG 2.0



# EXPERIENCING (SOME) DISABILITY



#### WHAT "ACCESSIBILITY" REALLY MEANS

Section 508 may be a set of rules. But to *effectively* implement best practices, it's helpful to understand how to achieve true accessibility.

Rather than thinking about accessibility on the extreme ends of the spectrum, think about serving people "in the middle."



#### PEOPLE "IN THE MIDDLE"

At one point in their lives, the "average" American may need access when they least expect it. Some don't even consider themselves "disabled." For example:

- a 20-something war vet returning from Afghanistan with mild hearing loss
- a 35 year-old who sprained her wrists after falling off her bike
- a 40-year old who is recovering from a temporary brain injury
- Someone who is shocked as they escaped the path of a tornado through their town and needs to access FEMA.gov.



### SIMULATOR EXERCISES: HEARING LOSS



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What does the world sound like to someone with a cochlear implant? Hear for yourself how the cochlear implant has evolved over the last two decades.

As you listen to the following audio samples, see how the distorted image of Alan Alda provides a visual correlation to the importance of information in interpreting the world.





#### SIMULATOR EXERCISES: HEARING LOSS

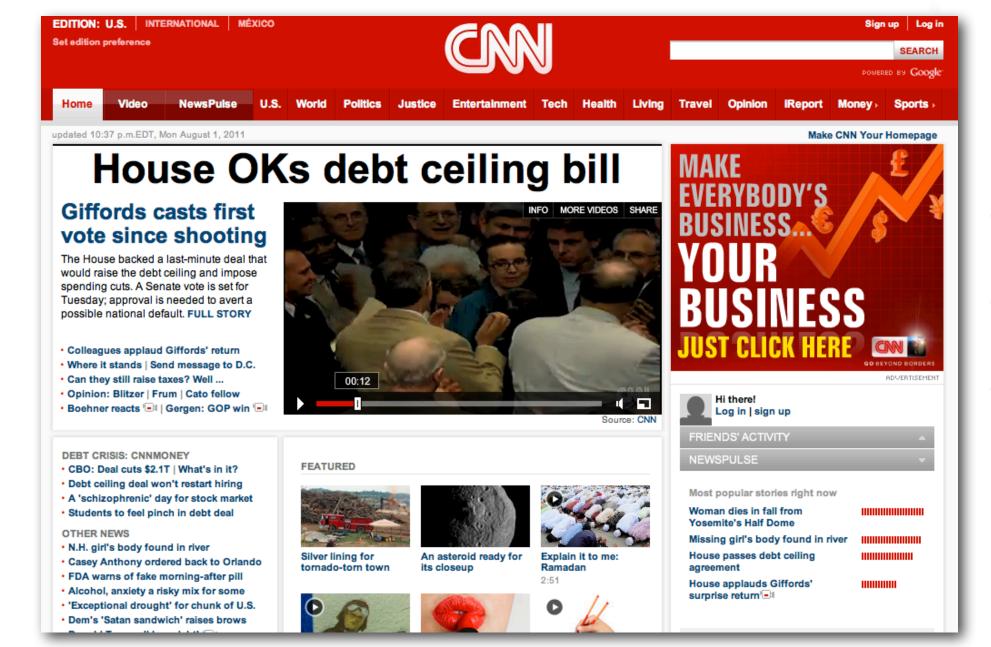
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## TYPICAL WEB EXPERIENCE FOR ME, TODAY:



- lots of video
- no captions available
- exclusive video, no transcript



#### SIMULATOR EXERCISES: LOW VISION

Put on the low-vision simulator goggles and go to:

www.ready.gov

List the top 5 essential items you need in your Basic Emergency Supply Kit



## THE RULES & BEST PRACTICES



#### WHAT IS SECTION 508?

Section 508 means that Electronic and Information Technology developed, maintained, procured, or used by the Federal Government must be made accessible to people with disabilities, including Federal employees *and* members of the public.

### WCAG = WEB CONTENT ACCESSIBILITY GUIDELINES

Widely adopted best practices that all organizations can use, especially when they do not need to comply to Section 508.

Most often, these guidelines improve on the 508 compliance.



#### WHO NEEDS TO COMPLY TO SECTION 508?

- Federal Agencies
- State and local governments most often apply, as they receive federal funding that stimulates compliance to Section 508.
- Businesses who provide goods and services to the federal government

## WHO NEEDS TO (ALSO) FOLLOW WCAG?

Anyone seeking to bring greater usability and experience to a site.



#### INTERESTING STAT:

Accessibility when considered in the beginning of a project adds 10% of time & cost.

After the fact, it's at least 2x the cost.



## ON THAT NOTE...

When accessibility is addressed in the beginning, Usability improvements and considerations are weaved into the process.



# WHERE & HOW TO START



#### CONTEXT

Context plays a larger role than we expect. Well-described information about content on a web-page is not only helpful for all types of disabilities, but also makes the page more searchable, user-friendly, and understood.

#### **Examples of Podcasts from NPR.org**

How to NOT do it:

**Show:** Wait, Wait...Don't Tell Me (NPR)

**Title:** Who's Carl This Time?

**Description:** Carl reads three quotes from the week's news: European Vacation, RSVP'ing the Grand Old Opry, and Rapture Redo

How to do it:

**Show:** How Stuff Works

Title: How Igloos Work

**Description:** Igloos were created by Inuit

Indians as temporary houses to use on fishing and hunting expeditions. Learn about igloos and find out how to construct an igloo.





#### \* ACCESSIBILITY KEY CHARACTERISTICS

#### **Blindness / Low Vision**

- Skip Navigation Links available;
- <alt> text available and effective;
- Contrast options & control;
- Provide long descriptions for complex images

#### **Deafness / Hearing Loss**

- Closed captioning available;
- Transcripts of audio / video available;

#### **Cognition / Intellectual Disabilities**

- Provide both images and text;
- Ensure site is user-friendly & understandable
- Avoid overly complex web functions
- Avoid jargon. User basic language.

#### **Mobility**

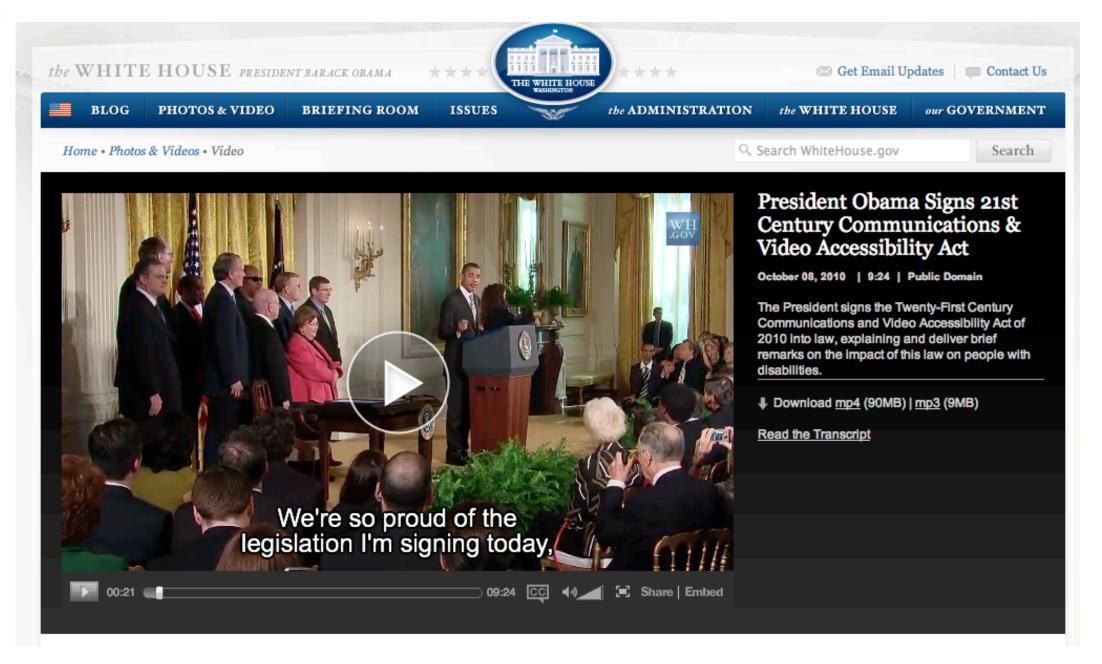
- Provide skip-navigation links;
- All website functions available from keyboard;
- Ensure pages are "error-tolerant."



### **APPLICATIONS FOR USABILITY**



### CASE STUDIES FOR GOOD ACCESSIBILITY & USABILITY



#### What's Right:

- Descriptive context;
- Closed captioning available;
- Transcript available;
- Audio-only version;
- User can enlarge video;
- Easy control of play-back;
- Clear navigation direction





#### HOW TO WRITE AN EFFECTIVE ALT TEXT

#### **Structure of an Effective ALT Text**

There is not an exact science to writing an ALT Text description. Follow the guidelines below and add a little bit of creativity.

#### A good ALT text is:

- **Succinct.** 1-2 sentences. No longer than 125 characters. If it needs to be longer, such as to describe a complex image, a long description <longdesc> can be used.
- **Descriptive.** The context and the description of the image are aligned. The *function* of the image is reflected as well.
  - For this reason, alt-text descriptions for images used in other context does not always apply in another context.
- **Unique.** The alt-text does not repeat the title, nor does it include the words "Photo of...., "Image of....to describe the image.
- **Creative**. The visitor can visualize the image without seeing it, and effectively understands why the image was used and the mood it conveys to the content.



### HOW TO WRITE AN EFFECTIVE ALT TEXT



INEFFECTIVE	EFFECTIVE
alt = "Image of Emergency Preparedness Kit"	alt = "Contents such as water bottles, band-aids, flashlights, and a poncho are laid out as part of an Emergency Preparedness Kit."
Why it doesn't work:  Text, "Image" is redundant because the screen reader already announces that there is an image.  There isn't any information about the kit. It can mean a number of things, so a further description is necessary.	Why it works:  There is an understanding that an Emergency Preparedness Kit is an important thing to have by the association of batteries and bottled water.  Use of "laid out" illustrates that they are in plain view - elevating its importance - not just packed up in a bag. It gives spatial awareness to the contents and size.



### HOW TO GET A VIDEO CAPTIONED



#### HOW TO MAKE "READ MORE" LINKS MORE ACCESSIBLE



### HOW TO TEST FOR ACCESSIBILITY & USABILITY



#### WRAP UP & SUMMARY

- Context is key. Provide multiple ways for people to access and interpret content.
- An automatic accessibility checker cannot make sense of an <alt> tag. You need to manually check and provide description of an image succinctly and accurately.
- It's also about serving people "in the middle" of the ability spectrum; especially those who do not consider themselves to have a disability.
- Section 508 are just baseline rules. Go beyond the basics and weave best practices into the site.
- Testing tools are available as toolbar plugins, or as full website checkers. Humans, though, are the best checkers.



### QUESTIONS?

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